

Animal Health Update

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UTAH DEPARTMENT OF
AGRICULTURE AND
FOOD
ANIMAL HEALTH
PROGRAM

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Vesicular Stomatitis

Vesicular stomatitis is a viral disease of horses, ruminants, and pigs that causes blister-like lesions. In 2019, there were 26 affected premises in Utah and more than 1,400 affected premises nationwide. Already this year there have been 30 affected premises in other states, and the USDA expects to see vesicular stomatitis outbreaks all along the Front Range.

It is important for animal owners and veterinarians to pay close attention to their animals for signs of vesicular stomatitis. VS can cause blister-like lesions to form in the mouth, tongue, lips, nostrils, hooves, and teats. When these blisters rupture, the skin underneath is extremely sensitive, and affected animals will often refuse to eat or drink and become lame. Dairy cattle often show a severe drop in milk production. The first sign is often excessive salivation, or drooling. If you look in the mouth you may see blisters or raw round areas. There is often scabbing on the nose, lips, and teats. If the hooves are affected, then the animal may become lame.



The most common method of transmission is biting flies, but it can also be spread by animal movements or moving the virus on objects. Once the disease is in a herd, it may be spread by contact with infected saliva. It is recommended that animal owners implement on-farm insect control programs.

Infected premises will be quarantined by the State Veterinarian until 14 days after lesions appear on the last case. Some states and countries will restrict the movement of horses and livestock from infected counties or states, so it is important to check requirements with the state of destination before moving animals. Utah does not allow importation of horses or livestock from infected premises, and health certificates for imported animals from a county with vesicular stomatitis must be completed within 14 days of departure.

Suspicious cases should be reported to the Utah State Veterinarian at (801) 982-2243 or

USDA APHIS VS at (801) 524-5010. USDA or UDAF veterinarians will test all suspicious cases in a county until the first case is confirmed in that county, and the testing will be performed at the government's expense. After confirmation of VS in a county, samples may be sent to the Utah Veterinary Diagnostic Laboratory to be tested at the owner's expense or the premises may be quarantined without testing.



VSV-affected states in 2020

Animal Disease Traceability

The USDA is currently seeking public comments on a proposed rule change that would end the production of metal brucellosis and "silver-brite" tags in 2022 and require RFID (radio frequency identification) tags for cattle and bison beginning January 1, 2023. The goal for USDA is to improve the ability of USDA and State Veterinarians to trace animals from birth to death by identifying the location where the official ID was placed or recorded and recording all movements of animals from one premises to another. The ability to rapidly trace the movement of animals allows government veterinarians to quickly contain potentially devastating disease outbreaks and to reduce the number of premises quarantined due to incomplete traceouts or incorrectly recorded identification.

While USDA has regulatory authority over interstate movement of livestock, the Utah Department of Agriculture and Food (UDAF) is responsible for the traceability of livestock within the state. This regulatory change does not change

the identification requirements found in Utah's Rule 58-1-3 for animals that do not leave the state. However, once the supply of metal tags is depleted, only RFID tags will be available as official ID tags.

While the use of RFID tags is of great benefit to the government for disease traceability purposes, there are also many benefits for producers.

- RFID tags are another form of identification for each animal.
- RFID tags are small, and less likely to get snagged on fences or trees than bangle tags, and less likely to be yanked out by jealous herd-mates.
- Scanning tags can be quicker than reading metal tags or tattoos for identification, and the scanner minimizes recording errors compared to manually writing down tag numbers.
- There are also a number of software programs available for both dairy and beef cattle that can use scanned numbers to pull up production and breeding records for those animals or enter vaccination and other information every time you work cattle.
- Some systems can connect the RFID tags with scales and dosing guns to customize the medical dose to the exact weight of the animal and help ensure that animals are not being over- or under-dosed.

Scanners must be placed within 18 inches of low frequency RFID tags, while ultra high frequency tags can be read at a distance of up to 21 feet. High frequency tags could be used in cow-calf operations with large amounts of rangeland, allowing ranchers to launch drones equipped with a high frequency RFID reader to locate lost animals. RFID tags can

also be paired with bangle tags, so the same number is on both tags. This allows you to visually find animals in a herd, while still allowing the use of a scanner.

USDA is currently providing a limited number of no-cost tags to states for use in replacement heifers. In addition, this fall UDAF may be requiring the use of RFID tags in all bulls tested for trichomoniasis; the Department plans to provide those tags free of charge to veterinarians. For more information on the benefits of RFID tags for your herd, visit the UDAF Animal Disease Traceability website at ag.utah.gov.

To comment on the USDA's proposal, visit https://www.federalregister.gov/d/2020 -14463.





Rabbit Hemorrhagic Disease in Central Utah

A highly fatal rabbit disease that has been spreading across the southwestern United States and northern Mexico has now entered Utah. Positive cases were recently confirmed in a domestic rabbit and a feral rabbit in Sanpete County. Rabbit Hemorrhagic Disease (RHD) is a very contagious fatal disease of wild and domesticated rabbits caused by a calicivirus called rabbit hemorrhagic disease virus. There are two types of RHD, RHDVa (or RHDV1) only affects domestic rabbits, while RHDV2 can infect hares, jackrabbits, cottontail rabbits, and domesticated rabbits.

Rabbit Hemorrhagic Disease is considered endemic (or always present) in Australia, New Zealand, Cuba, parts of Asia and Africa, and most of Europe. The US has had cases of RHDVa in Iowa, Illinois, New York, Indiana, Minnesota, and Utah. The last case of RHDVa in Utah was in 2001. RHDV2 was first diagnosed in Europe in 2010. Southwestern Canada experienced its first cases of RHDV2 in 2018, followed by cases in Ohio, Washington, and New York City. In early 2020, a widespread outbreak of RHDV2 emerged in the Southwestern US and northern Mexico, affecting New Mexico, Texas, Arizona, Colorado, Nevada, California, and Utah. It has caused cases in both wild and domestic rabbits.

RHDV2 is a highly contagious disease of wild and domestic rabbits that can kill 80 to 100 percent of infected rabbits. In most cases in pet rabbits, the rabbits rarely show any signs of illness and die suddenly within 6-24 hours. Rabbits may have a fever, nervous signs, difficulty breathing, and have frothy blood coming from their noses just prior to death. RHDV2 does not affect people or other animals. There is no cure for RHDV2.

The only treatment for RHD is supportive care. Survival of the acute form of RHD is rare, and chronic cases often suc-

cumb to the disease after several weeks. There are no tests currently within the United States for detecting RHD in live rabbits. Dead domestic rabbits may be submitted to the Utah Veterinary Diagnostic Laboratory by a veterinarian.

The virus can survive in the environment for months and can be spread by contact with infected rabbits or objects, people, or even shoes that have been contaminated by rabbit feces. Rabbit owners should follow good biosecurity practices with their rabbits, including housing them indoors if possible or off the ground, changing clothes and shoes before handling rabbits, especially after contact with other rabbits, and preventing wild rabbits, rodents, birds, and other animals from having contact with the rabbits or their feed.

There are no licensed vaccines for Rabbit Hemorrhagic Disease Virus 2 (RHDV2) in the United States. In the face of this outbreak of RHDV2 in the southwestern US,

the Centers for Veterinary Biologics is approving applications from veterinarians for the import of certain RHDV2 vaccines in states with confirmed cases of the disease. There are only 2 vaccines eligible for import, **FILAVAC VHD K C+V**, which is made by Filavie in France (www.filavie.fr) and **ERAVAC**, which is made by HIPRA in Spain (www.hipra.com). Guidance is available from UDAF for the importation of vaccine.

Please report any unexpected deaths in domestic rabbits to the State Veterinarian. For more information about RHDV2 at: ag.utah.gov or bit.ly/UtahRHD.

The State Veterinarian's Office has new phone and fax numbers:

Phone: (801) 982-2235

Fax: (385) 465-6026

Avian Influenza

Avian influenza is an infection of birds with influenza Type A viruses. These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species. Wild aquatic birds can carry avian influenza A viruses in their intestines and respiratory tract, but usually do not get sick. However, avian influenza is very contagious among domesticated birds, and some of these viruses can sicken and even kill certain bird species including chickens and turkeys. The risk to Utah is heightened as the State is centered between two major migratory flyways: Pacific and Central.

Infected birds shed virus in their saliva, nasal secretions, and feces. Susceptible birds become infected when they have contact with the virus as it is shed by infected birds. Our domestic poultry also can become infected through contact with surfaces or people that are contaminated with virus from the infected birds or water. As migrating birds lay over in Utah on their way through the State, they can leave behind a virus soup in our natural waterways.

Avian influenza viruses have been isolated from more than 100 different species of wild birds. Most of the wild birds from which these viruses have been recovered represent gulls, terns and shorebirds or waterfowl such as ducks, geese and swans. These wild birds are often viewed as reservoirs (hosts) for avian influenza viruses.



Avian influenza viruses are classified into two categories: low pathogenic avian influenza (LPAI), and highly pathogenic avian influenza (HPAI). Infection of poultry with LPAI viruses may cause no disease or mild illness, and may not be detected, but can easily convert to HPAI. Infection of poultry with HPAI viruses can cause severe disease with high mortality. Both HPAI and LPAI viruses can spread rapidly through poultry flocks.

Avian influenza outbreaks are of concern in domesticated birds for several reasons:

- the potential for low pathogenic H5 and H7 viruses to evolve into highly pathogenic viruses
- the potential for rapid spread and significant illness and death among poultry during outbreaks of highly pathogenic avian influenza
- the economic impact and trade restrictions from a highly pathogenic avian influenza outbreak
- the possibility that avian influenza A viruses could be transmitted to humans

When H5 or H7 avian influenza outbreaks occur in poultry, infected flocks are usually depopulated or culled. In addition, testing of flocks that are near or linked to the infected flocks, and quarantine of exposed flocks with depopulation if disease is detected, are the preferred control and eradication methods.

Because the economic impact of infection with Avian Influenza is a major concern, USDA, UDAF and DWR conduct routine surveillance in Utah's wild and domestic poultry to monitor influenza viruses that may have implications for animal and public health. All of Utah's participants in the National Poultry Improvement Program as well as all commercial poultry producers regularly test for Avian Influenza.

For more information about Avian Influenza, visit the USDA Avian Influenza page at: https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/ai